

BEST AVAILABLE COPY

FIG. 2A

09	120 120 120	180 180 180	240 240 240	300	360 360 360	420 420 420
ggycttgttc t	tcagacaaac	tcatacggag	agaagcacac	cagggctaat	tgcagagcaa	ccagytacaa t
aggcygwcaa c.t	tyagtagaga .c .t	attgttccgt 	gacaccctrg g. a.	gacacagggt	cactacacac	aacctaccgg
acccggggac	tcattgatgg	aacccaacag	cattccggac 	gactgtgggg	tgtgggtgct	gactgcccag
cgggggagtc	tacaaygcta c	tgcaagatca	gaccggcgtc	cctacaattt	ctggctcaat	agatgctcct
ggtctgaccc	ctcctccttc	atgacraacca	ccaacaaccg	gagacctcga 	cctggwttcc a	aagttcgatc
ggatacgatc 	caggatggaa 	gatcgcagcg	ccttctgatg	tctcaggtca	tgtctttttc	tgggaactac
CONSENSUS: CEF94-A: D6948-A: TY89-A:						

FIG. 2B

480 480 480	540 540 540	009	099	720 720 720	780 780 780	840 840 840
ctggtggcgt 	gtgaactgac	aaatygggaa t	atcttgggta 	tagcmacatg c	accaattctc	tygatgccat .t
agcacactyc t. c.	ggaagcctga 	atcaacgaca 	acatcatatg	ccaaaaatgg 	gccgatgatt 	tcagcyaaya ccc.
agtgaggtca 	gaccttccaa	aacagccaac	cagcttaccc	agggctygact	cataactgca	cacactgttc
ggagtctcac	taaacgccgt	tgatgtctgc	tmaccgtcct .C	ttcccgcwata	gagtctacac 	gggtaacaat
ctagtgagtc	aayggcacca c	tacaatgggt	ggggaagggg	ggtgacccca	gacaggccca 	caascaggtg c
ctactgcagg	ttatgcacta	agatgttagc 	cgtcctagta	tgtgagrcty gt ac	tgacagcagt	atcacagtac
CONSENSUS: CEF94-A: D6948-A: TY89-A:						

		000	000	000	000	000
000	096 096	102(102(102(108(108(108(114 114 114	1200 1200 1200	1260 1260 1260
gccttrtact g	grgctgtggc .g	ttgtgattcc	cctccaaaag 	cagtgacgat	acgaaagagt 	tcccaaatcc
agcgtccamg c.	gtaatcacca	ccattcaatma	gagatagtga	gggagcctag 	ctagtrgcct g	ttcgagctga
gtttcaaaca	tgggacwgcg a	caaccttwtg t	catcaaactg	gtcrgcaagw ga	tcccgtcacr	ggtgagcaac
gagarctcgt g	taggctttga	ccggcacyga c	caatcacatc	agatgtcrtg g	gggccctccg	cggtcgcygg t
agcrtygggg g.t a.c	atctacctya c.	gggctracgr ga	ataacccagc 	gcrggggatc a	aactatccag	tcygtcgtta c
cacaagcctc	gggygcyacccc	cgcaracaat a	aacmarcgag a.a	tggtggtcag	ccayggtggc t	ggcaacagga
CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: ccayg CEF94-A:t. D6948-A:c. TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:

FIG. 2D

1320 1320 1320	1380 1380 1380	1440 1440 1440	1500 1500 1500	1560 1560 1560	1620 1620 1620	1680 1680 1680
ccatgaacta	ggccaacaag 	ctccctgaa	tagctgtgcc	gggaaggtgt 	ccgcgtcagg	acaaggggta
gacccaggag	aagaccgtmt c.	gacctcaact	mtaaggagga a c	catgcaattg 	actgctcgag 	ctcgccgccg
cggccgattt 	tcttggcatc	ggaggtggcc 	aatccgggcc 	tcccctagcc	tgcttcagga	gcagctract g
tyacagaata .t	agagggaccg 	artacttcat .a	tcaaagacat	caccygccgc t	aggcacaggc	gccgcataag
aagaacctgg 	atactgagtg	gactttcgyg t.	gcattyggct c	acaytgttcc t	ctgggcgatg 	gctgcctcag
tgaactagca 	cacaaaattg 	ggagtacact	gattgcagga 	ggtggtctcy c t	agactacctg	aaaagcaaga
CONSENSUS: tgaa CEF94-A: D6948-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:

FIG. 2E

tygc 1740 .t 1740 .c 1740	cac 1800 1800 1800	cag 1860 1860 1860	agg 1920 1920 1920	act 1980 1980 1980	cag 2040 2040 2040	
ggattc	agggtgccac	. caytgaaca . t		atggggtact		
gtagtcgacg 	gtgttragag a	acacccaaag	caacctccwt	tatgctccag	gatgatgtct 	
ccagaatccy c t	cctcgactgc	agaygccatg c	agaagayctc c	agtctatgga 	kgtcccaata t g	
tycaggtgcc .c	gygcacacaa .t	cgacagtgga 	aaggcgtgcg 	cyggacayag .tc	aytacaccgt .c	
gcgaatctrt a. g.	rtactccgcg ga	gtggtyatya t.t. c.c.	gctgtcattg	cgaactctct	actgggagag 	
cgaggtagtc 	ttcacctggg	gctattccct	caaaatgttt 	atccttcata	tccactggag	
CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	

FIG. 2F

2160 2160 2160	2220 2220 2220	2280 2280 2280	2340 2340 2340 44	2400 2400 2400 104	2460 2460 2460 164	2520 2520 2520 2520
cgggagccct	ccactgcaca	ggyccaactg c	<pre>tmccytacct .ccctac</pre>	tggchgchtc ta ct	cwgcwgcmaa .aac .aac	araaygggat .gt .gt
gtggcyatga t	accaagctcg	gtraacaccg a	tgggacaggy c	sayctkgccm c.cta g.cga	gcmatggamg aa. ca.	tggytggaag c
cccmatccatac	ctttagaagc 	wgcattygay act ttc	tccmcgmgacac	acgycagtwc ca. tt.	ygcygtsmgw tcca.a ccca.a	bgtsttcatg t.g c.g
gacccaaagt	agaamgtrag aa cg	ctggtcccgg	tycctcacaa .c .t	cmamwgcwgg .c.ata .c.ata	aactcgarrr gag gag	<pre>cwgcdctcmr .taag .tgag</pre>
gatgtgtttc	ggcgagattg	ctyaagttgg t	atcaaacgtt 	tayctyccac ct ct	gagaccccmg c.	ytrttccrmt c.aaa. c.gaa. t.ggc.
agcttacatg 	caaygcytrt tt.g. cc.a.	ccgacttggc	ggcracgtty ac gt	caacctwccm aa ta	CONSENSUS: mgagttcaaa CEF94-A: a D6948-A: a	cgtsgaccca g
CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:

2580 2580 2580 284	2640 2640 2640 344	2700 2700 2700 404	2760 2760 2760 464	2820 2820 2820 524	2880 2880 2880 584	2940 2940 2940 644
tgmrmaattt cga cgc	gsacrgcwgg .gaa .gaa .cgt	aagacacacg	gggtagcact	camgagaaat c	ggttggcrtc a a	aggcwgarcc ag ag
gcmcaymgga ctc ctc	gccaagtayg c. c.	cagagggara a. a.	acaccrgaata	tggcaraaca g	gagaagagcc 	gctccaggac
cgacccgaac	gtcgcaragrag	agargargca ga ga	ctacttygca t	gctvaagtac a g	ygtgcaygcr cta cta tc.g	gatctacggg
tcgcmctcaga	cmggmagcaa .ac .ac	gccccacdcc a t	cbatgggcat.ct.	gcccggcca	aycyagacta .t.t .c.t	cagcyacgtct
atggcyaactc	gcwccmcarg aaa. tcg.	gaggcymgrg tc.g. cc.g.	aagatggara g. g.	cgrggsccaa ag gg	aacgaggact 	rtcytaaggg ac ac
tgtracygay gtc gtt	ycthgcaaay ttc tcc	ctacggagtg 	CONSENSUS: gatctcmaag CEF94-A:a D6948-A:a	caaygggcactt	accdgahccm gca tta	agaagaacar a a
CONSENSUS: tgtrac CEF94-A:g D6948-A:g TY89-A:a	CONSENSUS: ycthgc CEF94-A: tt D6948-A: tc TY89-A: ca	CONSENSUS: ctacgg CEF94-A: D6948-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: caaygg CEF94-A:t D6948-A:t TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:	CONSENSUS: CEF94-A: D6948-A: TY89-A:

FIG. 2H

	CONSENSUS: accccaagcy CEF94-A: t D6948-A: c TY89-A: c	ttcatagacg 	aagtygccar ta ca	rgtctatgaa a a	atcaaccatg 	grcgtggycc .ac .gc	3000 3000 3000 704
CONSENSUS: maaccargar CEF94-A: aaa D6948-A: caa TY89-A: agg		cagatgaarg a. a.	ayctgctcyt .tt. .tc.	gactgcgatg 	gagatgaagc	atcgcaatcc	3060 3060 3060 764
CONSENSUS: caggcgggct CEF94-A: D6948-A:		cyaccaaagc .t	cmaagccaaa .c	acccaatgct	ccawcacaga a t	gacccctgg	3120 3120 3120 824
CONSENSUS: wcggctgggc CEF94-A: t D6948-A: t		cgctggatca 	ggrcbgtctc a.c g.t	tgaygaggac t	ytkgagtgag c.t c.t	gywcctggga .ta .ct	3180 3180 3180 884
CONSENSUS: gtctcccgac cEF94-A:	. •	accacccgcg	caggygtgga t	caccaattmr cg cg	kmmhtaswrm gactcaac gccacaac tcacgtga	atycsaaatt c.c c.c	3240 3240 3240 944
CONSENSUS: ggatccgttc (CEF94-A:	•	gcgggtcccc					3260 3260 3260 964

FIG. 3A

09	120 120 120	180 180 180	240 240 240	300 300 300	360 360 360	420 420 420	480 480 480
ggggygatrm caa	catgagtgac 	aaagcctacw t	tgaggatccs g	rrttytgcag agt gac	wgacytagcw ata tct	yattggagay tt cc	gcccaatgcg
gtggctacta	attctrccacg	cgttcggcat 	gggtgccacc	acggctacaa 	aaatactccc	tatctctccc	gcaaggaraa g
acgaattaac 	cttcttgatg 	atmtcagcag c	cctaargtyt at. gc.	ctcagrgara ag.	gagaccgayc c.	aaaccmacyc ct.	caycgcccka tt.
tctgggagtc	agtggctcct 	gcgaagcamg 	actcytgatc t	ggcmaagttc a	tgaggagtat 	rgctgtttta ga	ctacccaaca
ggtctgaccc	ctgccacgtt 	gtccacaggc	aygtggaaga .c	ctagtcgwct a	trccygagaa .gc	agatagargg a	tcccwaarta ag
ggatacgatg	ccrccgctrg gg.	rttttcaaya ac. gt.	gctggacarg a.	ytkgccagcc c.t t.g	ccacggtctc 	tggatgmgrc c.a.	caggagtact
CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: Yt CEF94-B: C. D6948-B: t.	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:

FIG. 3B

ggttccmgag 540 a 540 c 540	rgayaargcc 600 gcg 600 ata 600	rgaggtygcc 660 gc 660 at 660	gagcatmgcs 720 c.g 720 a.c 720	gccctgggtr 780 g 780 a 780	tggsgamttt 840 cc 840 ga 840	rccmtatgtw 900 aaa 900 gct 900	gtttctymga 960 ca 960 tc 960
tgtttctcca	aaaacatwag n	tkgcyatgaa r .gc g .tt a	acacytttga g	aggatgacaa g	gmgacgtaga t .a	caagtggact ro	tmtcraacca g.c.a.c.a.a.a.g.a.g.
atgatytacy tc	ctmytraccc ct.g	acymgacttg tc	aagcttgggt 	ccacccggtg	gtwctgacgg a	ctcaagtcat	atgatagcya t.
actcaagcag	tgargtmacc aa	gggacargcm aa	rgatcctcta g	accggtaggc	amggatgttg .c	caaaatcaac	wattggsgag ac tg
ayatcgcayt .cc. .tt.	rcctwaarga gag ata	ggacctacat	acccaaacaa	acatcacwyt ac.	grgtgccgtc .a	aytaccttcc .t	aaggagarac g
tacccgccmg a.	gccammgakr acgg	tayggragtg ta	actggragaa a	cagctacttg 	ccactcacaa	gaggttgarg a.	ggtcgcacca
CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:

gaagaagctr 1020 a 1020 g 1020	maaggctgar 1080 aa 1080 cg 1080	tccatcmcca 1140c 1140a 1140	aaayaacgtg 1200 t 1200 c 1200	wgggytraac 1260 at.g 1260 tc.a 1260	tgckgacaac 1320 g 1320 t 1320	gaggcaaac 1380 1380 1380	rtggtcmgay 1440 gac 1440 ac.t 1440	tgccccwgct 1500 t1500 a1500
ggtcraacaa ga	ttttgtttcc me	tatggtcagc to	ccaayagccc as	cgttyagagg wg	cyytwgtata tg.tc.tc.t	tagagaaggg tg	tyaccagagg rt.cg.	csatgaacat tç .c
gggacaaarg g.	tcatgygggc t	acccgkaaca g	cccgtgatgt	aarttcaacc a	gaacccaagg	tcaattgacc	tactacatmca.	gccacctttg
gcarggtgca a	ytggtactta t	gctcaccaag	gatmacctgg c	rtcactctac ag	ggcyccggaw ca	cacgtggtac	rgccgcmatg aa	tcaracatgg a
crctgytgaa .at .gc	taagtgacta 	aaagyacatg t	tgatctcwat	argggtgtcc .a	agtggatawt t.	tycactcmaa .ca	aacacatgca	cmatgttcaa .a
gagctatcar a	ctcagcatgy t	aggtacgaca	acacacctca	ttgaacattg 	aggatcgtsg c	atatacattg 	tgcackcgyc tc.	aacggygacc c
CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: CEF94-B: D6948-B:

FIG. 3D

1560 1560 1560	1620 1620 1620	1680 1680 1680	1740 1740 1740	1800 1800 1800	1860 1860 1860	1920 1920 1920	1980 1980 1980	2040 2040 2040
tggtcaaggc	gctwgaccag t	tgargacaag g	gctsagacag g	rcaayccagc at	tctygggatc c	caarggrgta g.a	wgtcaggtay at tc	ytgcaagaay ct tc
tyaagacmta .tc	gcacsctwgt ga	tcaartcaat a	tyagggggaa .c	tygaaccaga .t	acagcaaaga 	ctgcgtatcc	catacaargt g	tgaacaaagc
aacctkcara ga.	cayctyytka cct.g. ttc.t.	agcgargagt g	attgatgaya t.	agtggrgggg g	tcwgcwacwt ata.	ttttgytctg	atcgagcarg g.	tacccactcc
yctgatwatg ca tt	catcaacaac	yagwccagac ca	tgagaggtcc 	agggtacctg	actmggrtgg ag	ggaacgcyta c	caargtyggg ac	tggttggaac
actcatcrtg	cagccacstt	tgarrcarcc gag	acttyaagat t	ttgcacaacc	agctkgacct t	tgcttgacaa	gyctcaartc .tg	ggttggtagg
ctagtkgtgg g	agygggaatg c	tggaacytga c	ctrggyatca at	cttgtccycc	ccaactgtwg t.	tatgtgccgg	gagaayaara c.g.	gaggcgttga
CONSENSUS: CEF94-B: D6948-B:								

FIG. 3E

210 210 210	2160 2160 2160	2220 2220 2220	2280 2280 2280	2340 2340 2340	2400 2400 2400	2460 2460 2460	2520 2520 2520	2580 2580 2580
ygagttcctm ca tc	yatcaagctg t	rccyccaaat gc	caagaccggy t	mmgmagccgw aa.at cc.ca	yaagccmgay cac tc.t	ggagaaagcc	ycttgaagcr ca tg	acagaccgcc
tcccrctcga	aaggcttcaa 	tacccccaa	gcaaygccct c	tagccacmgc a	tccacaagtc	cagacctkct t	caagcgacgc	tyaagaaccc .c
gccaaggggt	gargcyttcg gc	aacarrccag ag	aaggcagtca	ctcgtcctyc	gccgagaaac	gaaacyctgt t	ctcgtggaaa 	tacccagarg a.
gcatctggag	mgagttcggw at ca	mgccgaactk ag ct	yggkggrctm tgac ctga	actragtggy gt	caaggcagar a g	ygaamgrtca ca.a tc.g	ycactcagca ct	cacyccmaag tc
cmgctcggcg .c	<pre>cwgagytgtc .tcat</pre>	ckgagagcct .t	cagtcaacac	aygaagccgg .c	cagtyaaggc t	cagactggtt 	gcaaggtcgc	cytcmgtgta .tc
aaygcargyg cg.c.	gccgagtggt 	acmgtaacay ct ac	gtcaacagac	cggtayagra c.g.	ctrcargayg gat. agc.	gaccccgatg	gacatygcca t	gtycagtcra tg. ca.
CONSENSUS: CEF94-B: D6948-B:								

FIG. 3F

CONSENSUS: CEF94-B: D6948-B:	tccaaccccg	CONSENSUS: tccaaccccg ttgttgggct ccacctgccc gccaagagrg ccaccggtgt CEF94-B:a	ccacctgccc	gccaagagrg a.		ccaggcmgct 2640 c 2640 a 2640	2640 2640 2640
CONSENSUS: ctt CEF94-B: D6948-B:	cttctcggag 		caggracgag cagaccaatg a	gggatggagg 	cyccaacacg .c	gtccaagaac 2700 2700 2700	2700 2700 2700
CONSENSUS: CEF94-B: D6948-B:	CONSENSUS: gccgtgaaaa CEF94-B: D6948-B:	tggccaaamg c.	gcggcaacgc 	tggccaaamg gcggcaacgc caaaargaga gccgccaaya gccatgatgg 2760 	gccgccaaya c.	gccatgatgg	2760 2760 2760
CONSENSUS: gaa CEF94-B: D6948-B:	gaaccactca	agaagaggac 	agaagaggac actaayccca t c	gaccccgtat	ccccggcctt	cgcctgcggg	2820 2820 2820
CONSENSUS: CEF94-B: D6948-B:	 						2827 2827 2827

FIG. 4A

09	120 120 120	180 180 180	240 240 40	300	360 360 360	420 420 420
DTGSGLIVFF	STLPGGVYAL	TSYDLGYVRL	SANIDALTSL	PFN.VIPT.ELNIS.	LVAYERVATG	KTVWPTREYT
ETSTYNLTVG	LVSRSLTVRS	GEGVTVLSLP	Q.GGVTITLF .P .A	GLT.GTDNLTL	NYPGALRPVT	ILSERDRLGI
DTLEKHTLRS	NLPASYNYCR	INDKIGNVLV	ADDYQFSSQY	VITRAVAA.N N. D.	GSLAVTIHGG	DPGAMNYTKL
PTTGPASIPD	KFDQMLLTAQ	YNGLMSATAN	DRPRVYTITA	IYLIGFDGTA	AGDQMSWSA.	KNLVTEYGRF
IVPFIRSLLM	HYTLQSNGNY	GSLSELTDVS	PKMVATCDSS	SV.GL.LGATHV	EIVTSKSGGQ	FELIPNPELA
MTNLQDQTQQ	PGFPGSIVGA	NGTINAVTFQ	GDPIPAIGLD	S.GGELVFQT .V .I	ITQPITSIKL	SVVTVAGVSN
CONSENSUS: CEF94-PP: D6948-PP: TY89-PP:						

FIG. 4B

480 480 480	540 540 540	009	099 099	720 720 720	780 780 780 58	840 840 840 118
HAIGEGVDYL	VVDGILASPG	QPPSQRGSFI	NSGNLAIAYM	VNTG.NWATF	AMEAAANVDP	AKYGTAGYGV
TLFPPAAPLA	ANLFQVPQNP	AVIEGVREDL	SKDPIPPIVG	LKLAGPGAFD	ETPELESAVR	APQAGSKSQR
RRIAVPVVS I L	LAADKGYEVV	TPKALNSKMF	DDVWDDSIML	TKLATAHRLG	HLAMAASEFK D	AHRMRNFLAN
AFGFKDIIRA	AASGRIRQLT	VVITTVEDAM	TGRDYTVVPI	GEIE.VSFRSK	YLPPNAGRQY	MANFALSDPN
DLNSPLKIAG	TARAASGKAR	VLREGATLFP	YAPDGVLPLE	VAMTGALNA.	WDRLPYLNLP	WLEENGIVTD
DFREYFMEVA	LGDEAQAASG	.LRGAHNLDC V I	RTLSGHRVYG	DVFRPKVPIH	IKRFPHNPRD	LFQSALSVFM
CONSENSUS: CEF94-PP: D6948-PP: TY89-PP:						

FIG. 4C

900 900 900 178	960 960 960 238	1012 1012 1012 290
WQNTREIPDP 	INHGRGPNQE	LE
CONSENSUS: EARGPTPEEA QREKDTRISK KMETMGIYFA TPEWVALNGH RGPSPGQLKY WQNTREIPDP CEF94-PP:	CONSENSUS: NEDYLDYVHA EKSRLASEEQ ILRAATSIYG APGQAEPPQA FIDEVAKVYE INHGRGPNQE CEF94-PP:	CONSENSUS: QMKDLLLTAM EMKHRNPRRA PPKPKPKPNA PTQRPPGRLG RWIRTVSDED LE CEF94-PP:
TPEWVALNGH	APGQAEPPQA 	PTQRPPGRLG
KMETMGIYFA	ILRAATSIYG	PPKPKPKPNA L
QREKDTRISK	EKSRLASEEQ	EMKHRNPRRA
EARGPTPEEA	NEDYLDYVHA	QMKDLLLTAM
CONSENSUS: CEF94-PP: D6948-PP: TY89-PP:	CONSENSUS: CEF94-PP: D6948-PP: TY89-PP:	CONSENSUS: CEF94-PP: D6948-PP: TY89-PP:

FIG. 5A

MSD.FNSPQA RS.ISAAFGI KPTAGQDVEE LLIPKVWVPP EDPLASPSRL I T T T T T T T T T T T T T T T T T T	09	120 120 120	180 180 180	240 240 240	300 300 300	360 360 360	420 420 420	480 480 480	540 540 540
MSD.FNSPQA RS.ISAAFGI KPTAGQDVEE LLIPKVWVPP.I.V. I. V. T.	AKFLRENGYK	YPTHRPSKEK	GQATRLVAMK	RMLVLTGDVD	QGAGTKGSNK	ITWPVMSNSP	TWYSIDLEKG	LIMNLQIKTY	ERSIDDIRGK
MSD.FNSPQA RS.ISAAFGI KPTAGQDVEE I T	EDPLASPSRL	IGDQEYFPKY	DKAYGSGTYM	PWVPLTRVPS	FLRELS.LLK	PSPTHLMISM	ADNIYIVHSN	APALWDSSC	EDKLGINFKI
MSD.FNSPQA RS.ISAAFGI .I.QPRSLPEN EEYETDQILP V. I.OPRSLPEN EEYETDQILP	LLIPKVWVPP	AVLKPTLSLP	EVTLLTQNIR	PVGPPGEDDK	IGEMIAISNQ	LTKTRNIWSA	AP.EPKALVYE	QTWATFAMNI	. PDSEEFKSI R
MSD.FNSPQAI.QPRSLPEN VCQPRSLPEN VCOPRSLPEN CCOPRSLPEN C	KPTAGQDVEE	DLAWMRQIEG	VPEALKD	SIAQLLDITL	PYVGRTKGET	KAERYDKSTW	GLNRIVEWI.	WSDNGDPMFN	LDQWNLM.QP
MSD	RS.ISAAFGI T	EEYETDQILP	LKQMIYLFLQ	DPLKLGYTFE	KINLKSSSGL	WYLSCGLLFP	SLYKFNPFRG	AAMYYILTRG	INNHLLSTLV
CONSENSUS: CEF94-VP1: D6948-VP1: D6948-VP1: D6948-VP1: CONSENSUS: CEF94-VP1: D6948-VP1: D6948-VP1: CONSENSUS: CEF94-VP1: D6948-VP1:	MSD.FNSPQA	.LQPRSLPEN V	PNAYPPDIAL	EVATGRNPNK	$\begin{array}{c} \text{G.FEVEDYLP} \\ \cdot \text{D} \\ \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \end{array}$	KKL1	NNVLNIEGCP	EANCTRQHMQ	GQGSGNAATF
	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:	CONSENSUS: CEF94-VP1: D6948-VP1:

FIG. 5B

009 009	999 999 999	720 720 720	780 780 780	840 840 840	881 881 879
ERLFCSAAYP	HLEAKGFPLD	GGLKAVSNAL	ERSETLSDLL	HLPAKRATGV	
LGIYVPVLDK ERLFCSAAYP	CKNNA.AARRG	PPNVNRPVNT	KPDDPDADWF	QTASNPVVGL	• Ф. 1
Q.SPTVELDL LGWSATYSKD.S	GWNYPLLNKA	IKLTVT.ESL AELN.PVPPKSK	LSGLVLLATA RSRLQDAVKA KAEAEKLHKS	TPKYPEVKNP	RQRQKESRQQ
	VRYEALRLVG	IKLTVT.ESL	RSRLQDAVKA	LEAVQSTSVY	SKNAVKMAKR
GYLSGGVEPE	KVGIEQAYKV	EFGEAFEGFN	LSGLVLLATA	HSALVETSDA	RPMGMEAPTR
LRQLV.LAQP	CONSENSUS: KGVENKSLKS CEF94-VP1: D6948-VP1:	EFLAEWSELS	KTGRYRNEAG	EKADIASKVA	QAALLGAGTS
CONSENSUS: LRQI CEF94-VP1: D6948-VP1:	CONSENSUS: KGVE CEF94-VP1: D6948-VP1:	CONSENSUS: EFLA CEF94-VP1: D6948-VP1:	CONSENSUS: KTGR CEF94-VP1: D6948-VP1:	CONSENSUS: EKAD CEF94-VP1: D6948-VP1:	CONSENSUS: QAAL CEF94-VP1: D6948-VP1:

FIG. 6

CONSENSUS: D6948-VP5: CEF94-VP5:	MVSRDQTNDR	CONSENSUS: MVSRDQTNDR SDD.PARSNP TDCSVHTEPS DANNRTGVHS GRHP.EAHSQ VRDLDLQFDC D6948-VP5:	TDCSVHTEPS	DANNRTGVHS	GRHP. EAHSQ R	VRDLDLQFDC	09
CONSENSUS: D6948-VP5: CEF94-VP5:	GGHRVRANCL	CONSENSUS: GGHRVRANCL FPW.PWLNCG CSLHTAEQWE LQVRSDAPDC PEPTGQLQLL QASESESHSE D6948-VP5:	CSLHTAEQWE	LQVRSDAPDC	PEPTGQLQLL	QASESESHSE	120 120 120
CONSENSUS: D6948-VP5: CEF94-VP5:	VKHT.WWRLC	CONSENSUS: VKHT.WWRLC TK.HHKRRDL PRKPE D6948-VP5:PW	PRKPE 				145 145 145

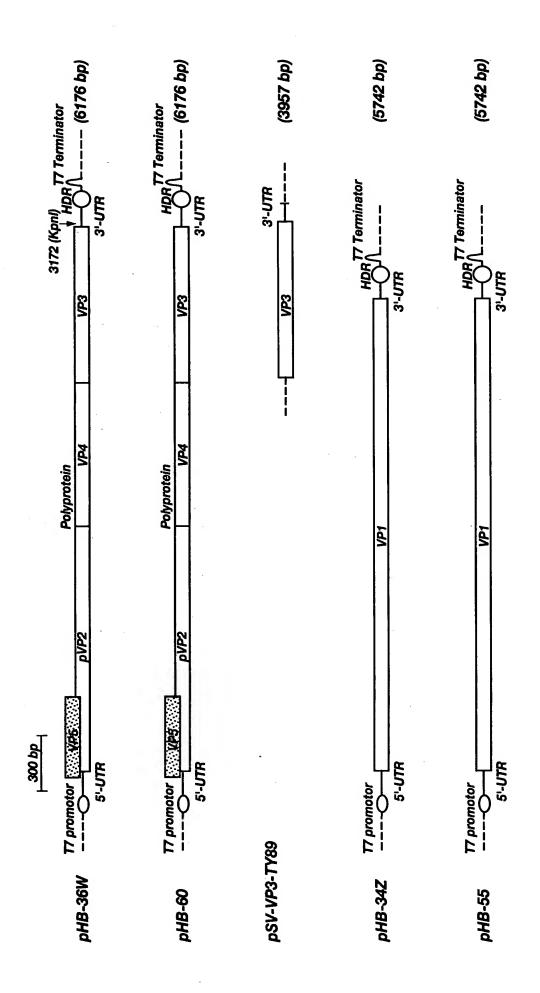


FIG. 7

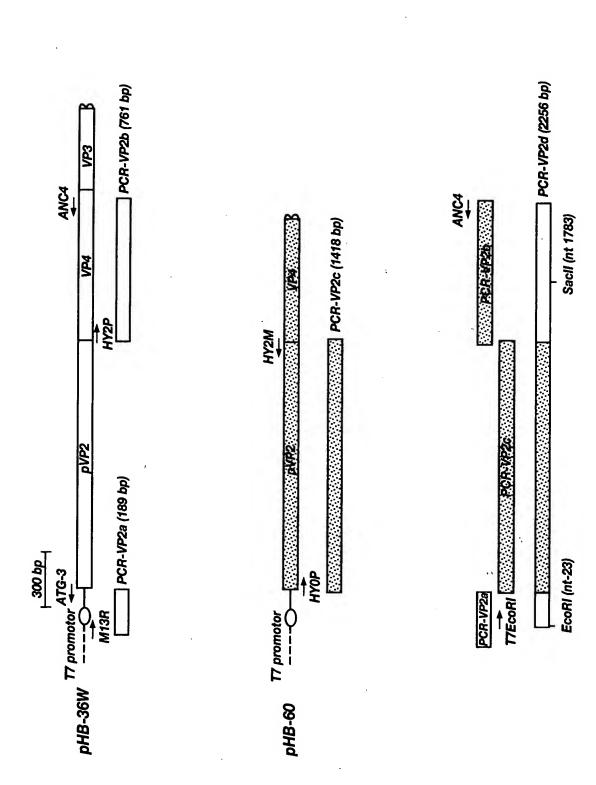
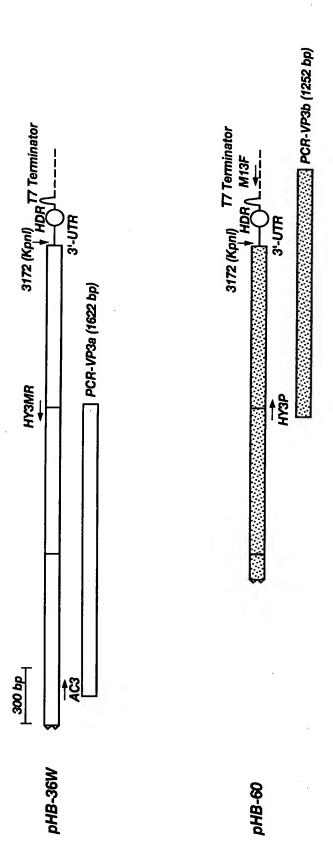


FIG. 8A



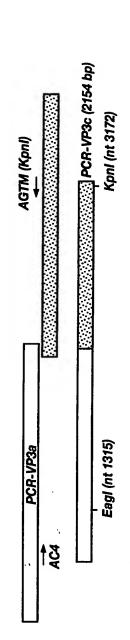


FIG. 8B

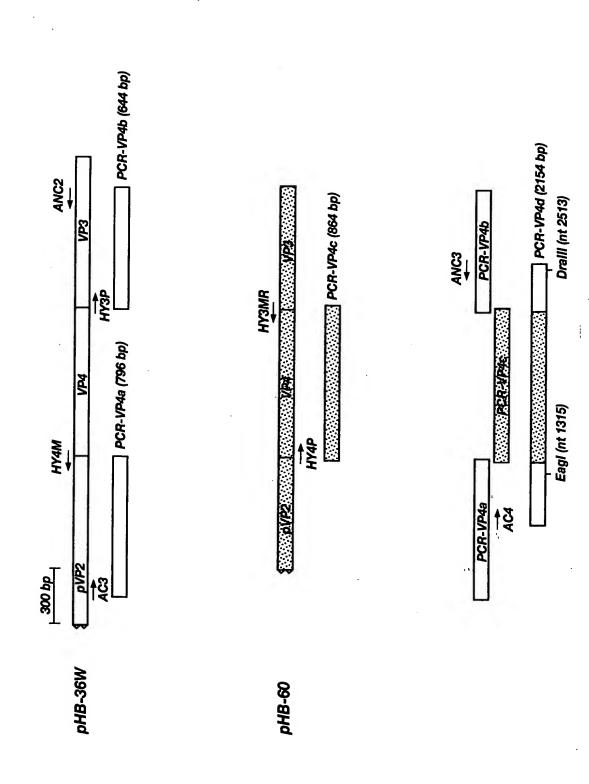


FIG. 8C

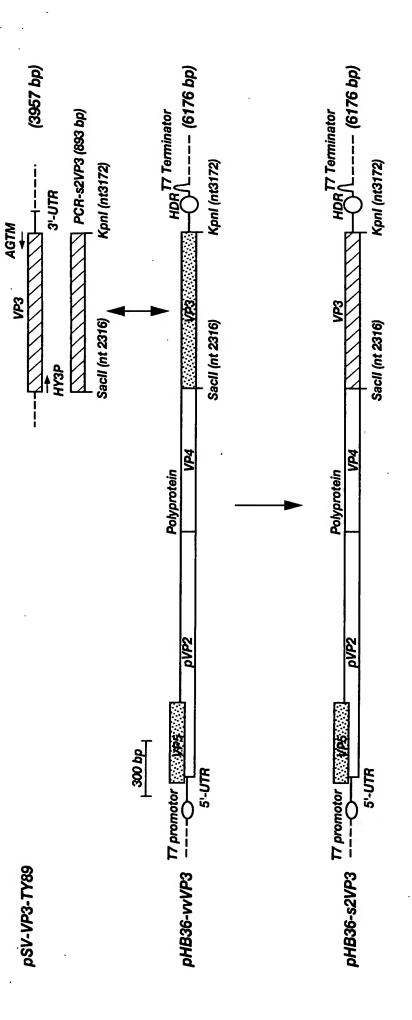


FIG. 8D

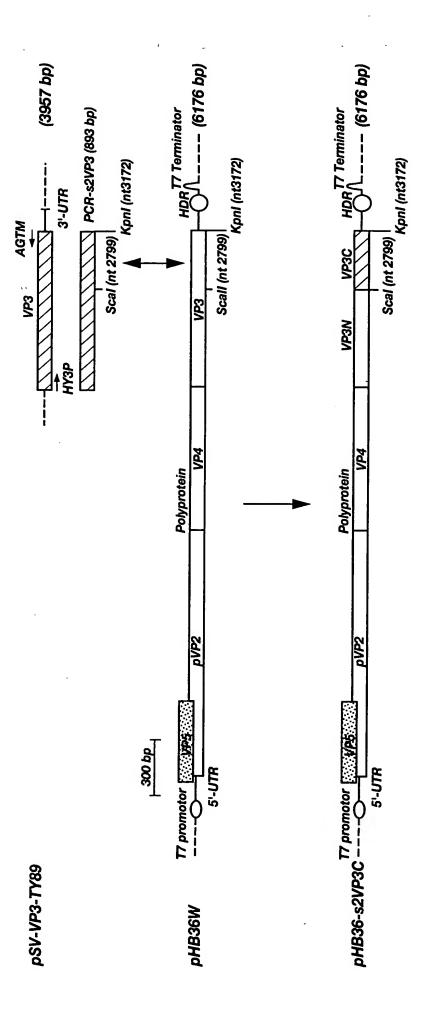


FIG. 8E

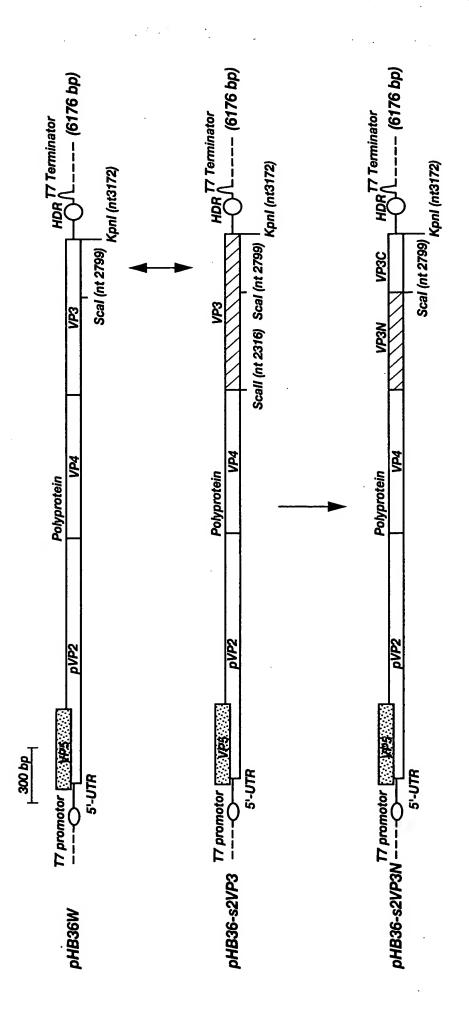


FIG. 8F

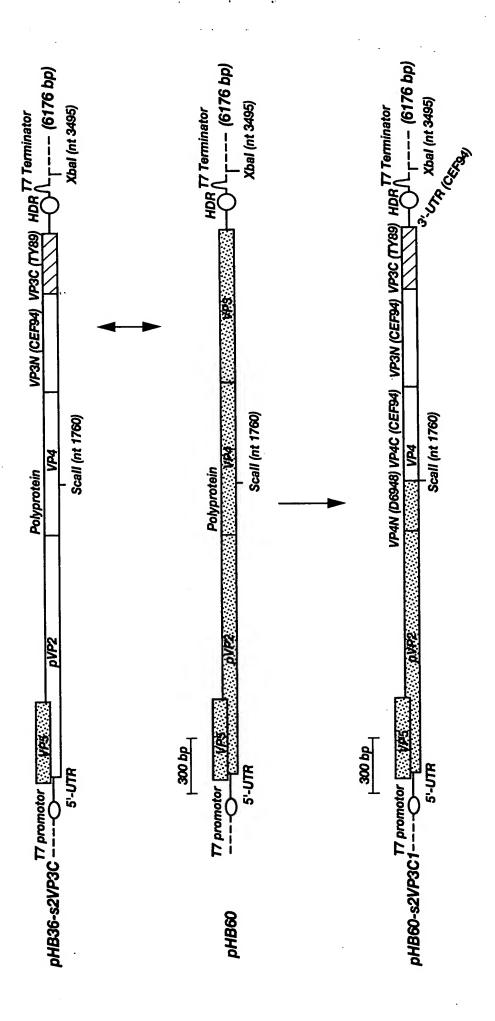
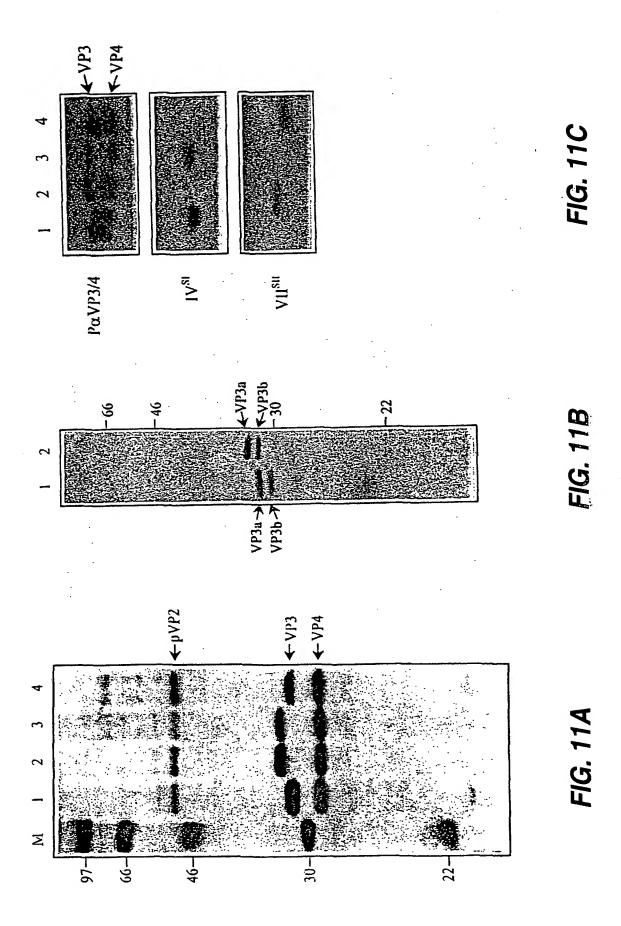


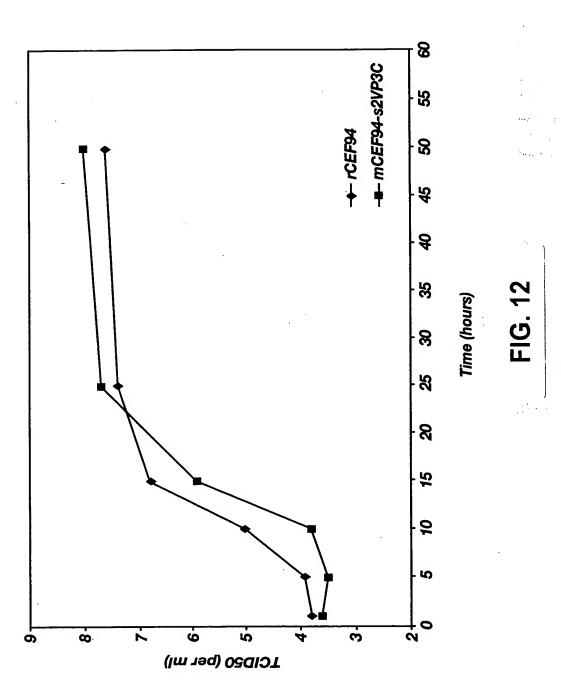
FIG. 8G

P 780	840	006 a	096 E	1012
ameaaanvd d	AKYGTAGYG [,]	WQNTREIPDP E.	INHGRGPNQ	LE
ETPELESAVR	APQAGSKSQR	RGPSPGQLKY	FIDEVAKVYE	RWIRTVSDED
WDRLPYLNLP YLPPNAGRQY HLAMAASEFK ETPELESAVR AMEAAANVDP 780	AHRMRNFLANK	PTPEEA QREKDTRISK KMETMGIYFA TPEWVALNGH RGPSPGQLKY WQNTREIPDP 900	ldyvha eksrlaseeq ilraatsiyg apgqaeppqa fidevakvye inhgrgpnqe 960 P V 960	ILLITAM EMKHRNPRRA LPKPKPKPNA PTQRPGRLG RWIRTVSDED
YLPPNAGRQY HLAMAASEFK	MANFALSDPN	SacI KMETMGIYFA	ILRAATSIYG V	LPKPKPKPNA
WDRLPYLNLP	WLEENGIVTD	QREKDTRISK	EKSRLASEEQ	EMKHRNPRRA
<i>SacII</i> PHNPRD	LFQSALSVFM WLEENGIVTD MANFALSDPN AHRMRNFLAN APQAGSKSQR AKYGTAGYGV 840	EARGPTPEEA	иеругрууна Р	QMKDLLLTAM
EF94-PP: 724-F Y89-PP: 724-	EF94-PP: Y89-PP:	EF94-PP: Y89-PP:	EF94-PP: Y89-PP:	EF94-PP:

HG. 9

FG. 19





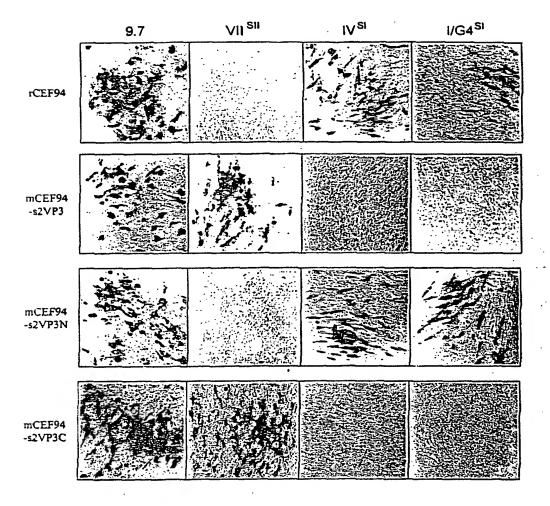


FIG. 13

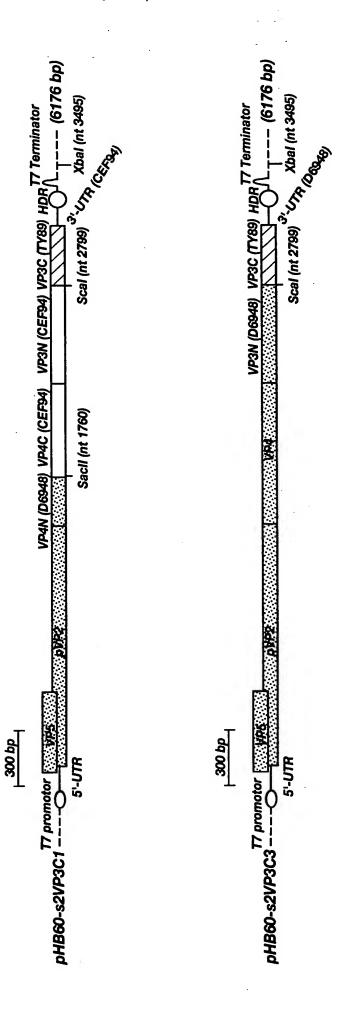


FIG. 14

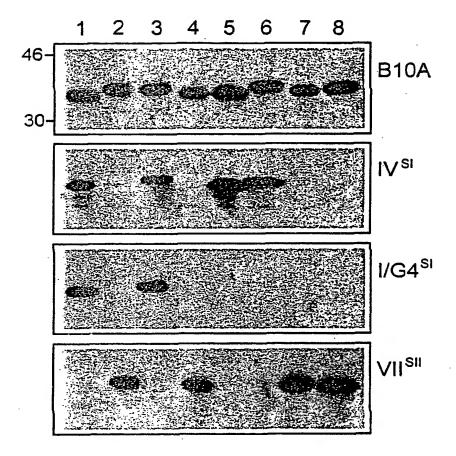


FIG. 15

FIG. 16

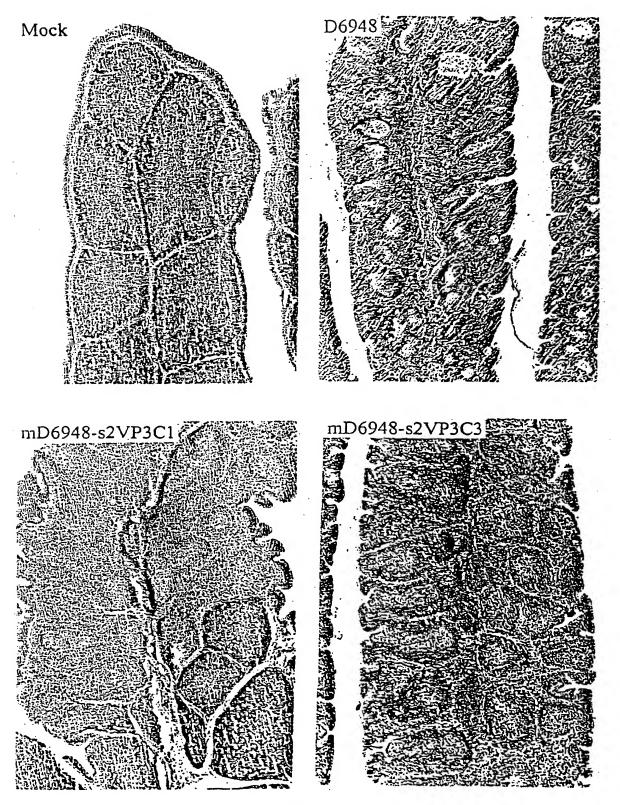
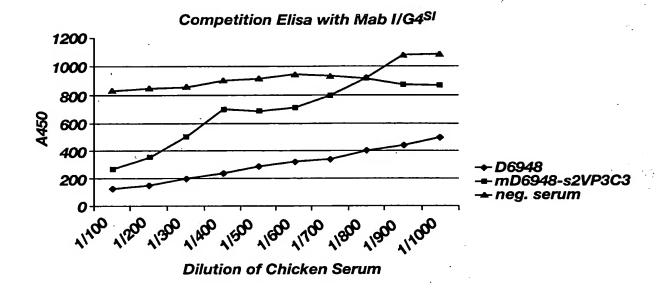


FIG. 17



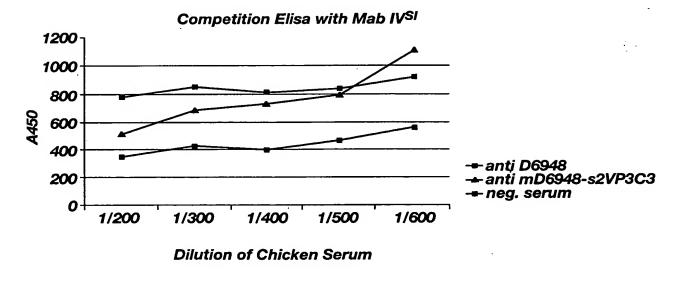


FIG. 18

FIG. 19

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<pre>SEF94-VP5:</pre>	

.

D6948-PP: CEF94-PP:	MTNLQDQTQQ IVPFIRSLLM PTTGPASIPD DTLEKHTLRS ETSTYNLTVG DTGSGLIVFF 60
D6948-PP: CEF94-PP:	PGFPGSIVGA HYTLQSNGNY KFDQMLLTAQ NLPASYNYCR LVSRSLTVRS STLPGGVYAL 120
D6948-PP: CEF94-PP:	NGTINAVTFQ GSLSELTDVS YNGLMSATAN INDKIGNVLV GEGVTVLSLP TSYDLGYVRL 180
D6948-PP: CEF94-PP:	GDPIPAIGLD PKMVATCDSS DRPRVYTITA ADDYQFSSQY QAGGVTITLF SANIDAITSL 240
D6948-PP: CEF94-PP:	SIGGELVFQT SVQGLILGAT IYLIGFDGTA VITRAVAADN GLTAGTDNLM PFNIVIPTSE 300 .VHV
D6948-PP: CEF94-PP:	ITQPITSIKL EIVTSKSGGQ AGDQMSWSAS GSLAVTIHGG NYPGALRPVT LVAYERVATG 360
D6948-PP: CEF94-PP:	SVVTVAGVSN FELIPNPELA KNLVTEYGRF DPGAMNYTKL ILSERDRLGI KTVWPTREYT 420
D6948-PP: CEF94-PP:	DFREYFMEVA DLNSPLKIAG AFGFKDIIRA LRRIAVPVVS TLFPPAAPLA HAIGEGVDYL 480
D6948-PP: CEF94-PP:	LGDEAQAASG TARAASGKAR AASGRIROLT LAADKGYEVV ANLFQVPQNP VVDGILASPG 540
D6948-PP: CEF94-PP:	ILRGAHNLDC VLREGATLFP UVITTVEDAM TPKALNSKMF AVIEGVREDL QPPSQRGSFI 600 $\overline{\rm V}_{\odot}$
D6948-PP: CEF94-PP:	RTLSGHRVYG YAPDGVLPLE TGRDYTVVPI DDVWDDSIML SKDPIPPIVG NSGNLAIAYM 660
D6948-PP: CEF94-PP:	DVFRPKVPIH VAMTGALNAY GEIENVSFRS TKLATAHRLG LKLAGPGAFD VNTGSNWATF 720

FIG. 20B

D6948-PP: CEF94-PP:	IKRFPHNPRD	IKRFPHNPRD WDRLPYLNLP YLPPNAGRQY DLAMAASEFK ETPELESAVR AMEAAANVDP 780	YLPPNAGRQY	DLAMAASEFK H	ETPELESAVR	AMEAAANVDP	780 780
D6948-PP: CEF94-PP:	LFQSALSVFM	LFQSALSVFM WLEENGIVTD MANFALSDPN AHRMRNFLAN APQAGSKSQR AKYGTAGYGV 840	MANFALSDPN	AHRMRNFLAN	APQAGSKSQR	AKYGTAGYGV	840 840
D6948-PP: CEF94-PP:	EARGPTPEEA	EARGPTPEEA QREKDTRISK KMETMGIYFA TPEWVALNGH RGPSPGQLKY WQNTREIPDP 900	KMETMGIYFA	TPEWVALNGH	RGPSPGQLKY	WQNTREIPDP	006
D6948-PP: CEF94-PP:	NEDYLDYVHA	DYVHA EKSRLASEEQ ILRAATSIYG APGQAEPPQA FIDEVAKVYE INHGRGPNQE 960	ILRAATSIYG	APGQAEPPQA	FIDEVAKVYE	INHGRGPNQE	096 096
D6948-PP: CEF94-PP:	QMKDLLLTAM	LLLTAM EMKHRNPRRA PPKPKPKPNA PTQRPPGRLG RWIRAVSDED LE	EMKHRNPRRA PPKPKPKPNA	PTQRPPGRLG RWIRAVSDED	RWIRAVSDED		1012 1012

FIG. 21A

D6948-VP1: CEF94-VP1:	MSDVFNSPQA	RSKISAAFGI T	KPTAGQDVEE	LLIPKVWVPP	EDPLASPSRL	AKFLRENGYK	09
D6948-VP1: CEF94-VP1:	ILQPRSLPEN V	EEYETDQILP	DLAWMRQIEG	AVLKPTLSLP	IGDQEYFPKY	YPTHRPSKEK	120 120
D6948-VP1: CEF94-VP1:	PNAYPPDIAL	LKQMIYLFLQ	VPEATDNLKDNEG	EVTLLTQNIR	DKAYGSGTYM	GQATRLVAMK	180 180
D6948-VP1: CEF94-VP1:	EVATGRNPNK	DPLKLGYTFE	SIAQLLDITL	PVGPPGEDDK	PWVPLTRVPS	RMLVLTGDVD	240 240
D6948-VP1: CEF94-VP1:	GEFEVEDYLP .D	KINLKSSSGL	PYVGRTKGET	IGEMIAISNQ	FLRELSALLK	QGAGTKGSNK	300
D6948-VP1: CEF94-VP1:	KKLLSMLSDY	WYLSCGLLFP	KAERYDKSTW	LTKTRNIWSA	PSPTHLMISM	ITWPVMSNSP	360 360
D6948-VP1: CEF94-VP1:	NNVLNIEGCP	SLYKFNPFRG	GLNRIVEWIM	APDEPKALVY	ADNIYIVHSN	TWYSIDLEKG	420 420
D6948-VP1: CEF94-VP1:	EANCTRQHMQ	AAMYYILTRG	WSDNGDPMFN	QTWATFAMNI	APALVVDSSC	LIMNLQIKTY	480 480
D6948-VP1: CEF94-VP1:	GQGSGNAATF	INNHLLSTLV	LDQWNLMKQP	SPDSEEFKSI R	EDKLGINFKI	ERSIDDIRGK	540 540
D6948-VP1: CEF94-VP1:	LRQLVPLAQP	GYLSGGVEPE	QPSPTVELDL .S	LGWSATYSKD	LGIYVPVLDK	ERLFCSAAYP	009
D6948-VP1: CEF94-VP1:	KGVENKSLKS	KVGIEQAYKV	VRYEALRLVG	GWNYPLLNKA	CKNNASAARR	HLEAKGFPLD	099
D6948-VP1: CEF94-VP1:	EFLAEWSELS	EFGEAFEGFN	IKLTVTPESL	AELNRPVPPK	PPNVNRPVNT	GGLKAVSNAL	720 720

FIG. 21B

RSRLQDAVKA KAEAEKLHKS KPDDPDADWF ERSET	D6948-VP1: KTGRYRNEAG LSGLVLLATA RSRLQDAVKA KAEAEKLHKS KPDDPDADWF ERSETLSDLL 780 CEF94-VP1:	LSDLL 780	780	RATGV 840	cΣα
RSRLQDAVKA KAEAEKLHKS KPDDPDADW	LSGLVLLATA RSRLQDAVKA KAEAEKLHKS KPDDPDADW	IF ERSET		il HLPAK	
RSRLQDAVKA KAEAEKLHKS	RYRNEAG LSGLVLLATA RSRLQDAVKA KAEAEKLHKS KPDDPDADWF ERSETLSDLL DIASKVA HSALVETSDA LEAVQSTSVY TPKYPEVKNP QTASNPVVGL HLPAKRATGV	KPDDPDADW		QTASNPVVG	
RSRLQDAVKA	LSGLVLLATA RSRLQDAVKA	KAEAEKLHKS		TPKYPEVKNP	•
	LSGLVLLATA HSALVETSDA	RSRLQDAVKA		LEAVQSTSVY	•
KTGRYRNEAG EKADIASKVA		D6948-VP1:	CEF94-VP1:	D6948-VP1:	CEF94-VP1:

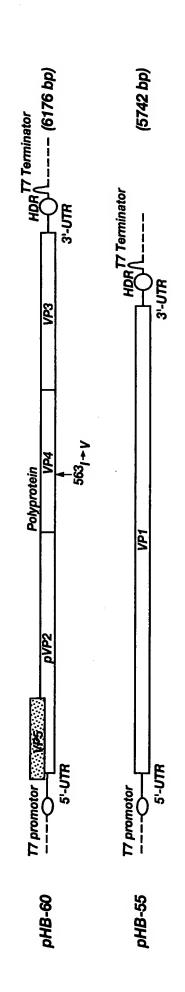
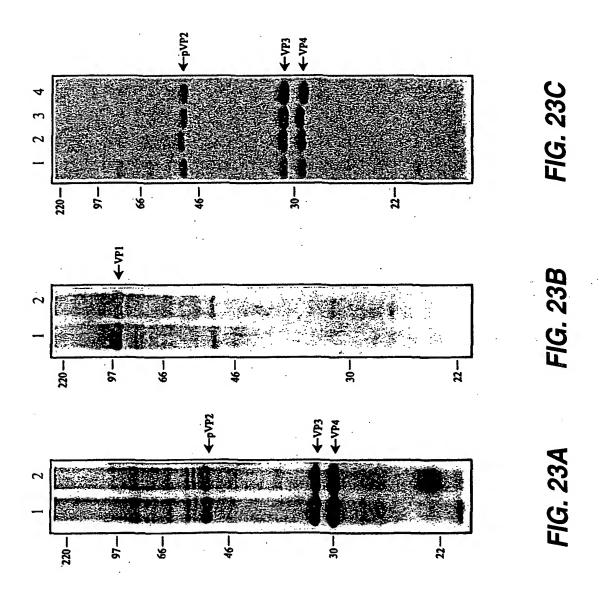


FIG. 22



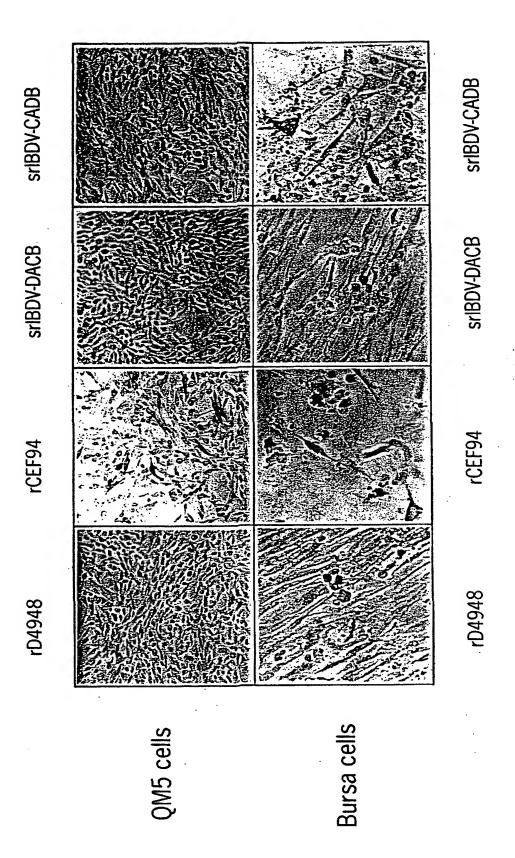


FIG. 24

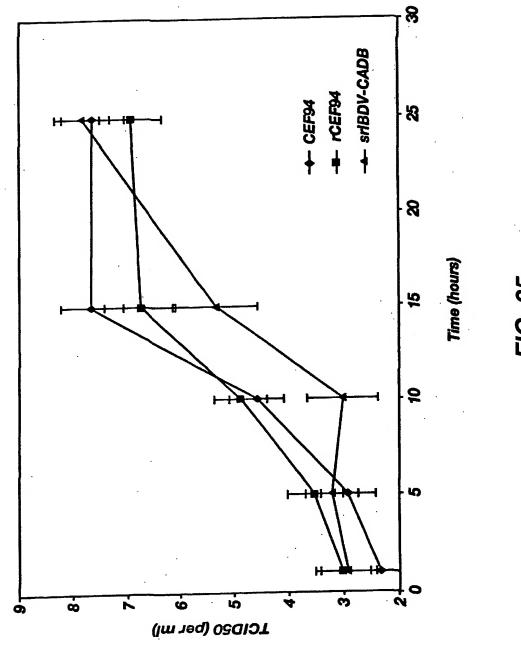


FIG. 25

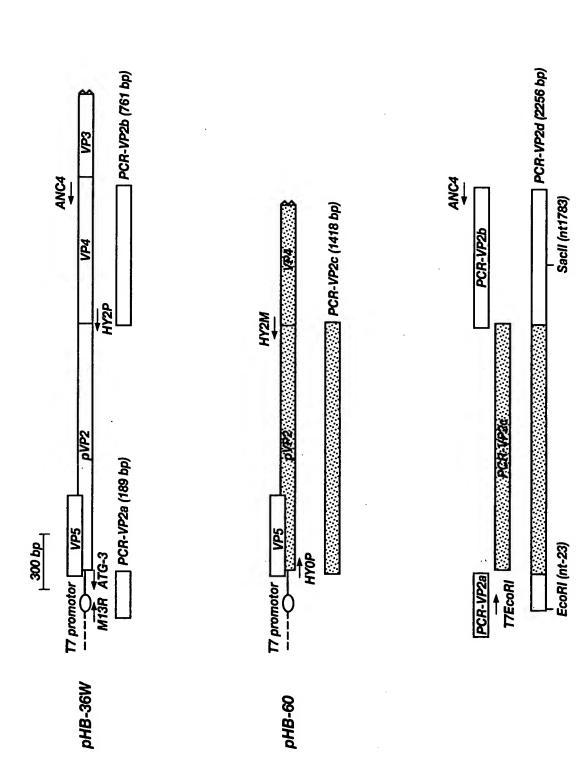


FIG. 26

FIG. 27

mCEF94-wVP2

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